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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,579	09/15/2003	Kenneth M. Spink	02-ASD-184 (GT)	9319
200	7590	03/29/2006	EXAMINER	
EATON CORPORATION EATON CENTER 1111 SUPERIOR AVENUE CLEVELAND, OH 44114			OMGBA, ESSAMA	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,579

Applicant(s)

SPINK ET AL.

Examiner

Essama Omgba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-13 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 14-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "32" has been used to designate both the "spring" and the "valve member". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "recesses 81" (see paragraph 18), "guide 86" (paragraph 20), "passage 75" and "valving surface 90" (paragraph 21). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

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CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: on page 4, different reference numerals must be assigned to the "valve member" and the "spring", see paragraphs 12-14; the same applies to the "labyrinth seal" and the "longitudinally extending grooves" on page 5, paragraphs 19 and 20 where reference numeral "84" has been used for both.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear where the "pair of oppositely disposed slots" is formed. Furthermore there is no antecedent basis for the recitation of claim 3 because as understood by the examiner the "step of engaging" recited in claim 1 relates to the cooperating surfaces on the float chamber and the float and claim 3 seems to be directed to the cooperation

between the "valve member 88" and the "upper end of the body 52" through projections formed on the valve member and slots formed in the upper end of body 52, thereby preventing rotation of valve member 88 during spin welding.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2, 4, 5, 9-13 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spink (US Patent 6,584,996) in view of Aoki et al. (US Patent 6,408,867).

With regards to claims 1, 2, 4, 10, 11, 20 and 21, Spink discloses a float operated vapor vent valve for mounting through an access opening in a fuel tank and a method of mounting the float operated vapor vent valve to the fuel tank wherein the valve body is spin welded to the tank, see column 1, line 51-58. Spink does not disclose the float including surfaces thereon engaging cooperating surfaces in the float chamber so as to prevent relative rotation between the float and the float chamber during spin welding. However it is known to provide floats and float chambers with engaging cooperating surfaces that prevent relative rotation between the float and the float chamber as attested by Aoki et al., see column 5, lines 13-19 and figures 1 and 2. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made,

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to have used a float and a float chamber with engaging cooperating surfaces as taught by Aoki et al. in the float operated vapor vent valve of Spink, in order to realize the benefits of using such known and readily available float operated vapor vent valves. Applicant should note that the claimed structure of the float operated vapor vent valve is old and well known in the art, see for example the one disclosed by Aoki et al.

For claims 5, 9, 12, 13, and 17-19, Applicant should note that such, gravity operated pressure relief valves, obturators moveable with respect to pressure relief valves and valve bodies including bodies of non-weldable material with cover of weldable material are old and well known in the art.

Allowable Subject Matter

8. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claims 6-8 and 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed January 12, 2006 have been fully considered but they are not persuasive.

In response to Applicant's argument that "nothing in Aoki suggests engaging cooperating surfaces that prevent relative rotation between the float and the float chamber", the examiner respectfully disagrees. In column 5, lines 18-20, Aoki states that "A guide rib 40a is formed along the outside periphery of the float 40 and is **guided** by an inside wall of the casing", this clearly suggests a "guiding groove" that can clearly be seen in figures 1 and 2: as float 40 is introduced in casing 30, guide ribs 40a are seen engaging cooperating slots or grooves (see the encircled and marked portions of the attached figure), and this engagement will prevent the float from rotating within the float chamber.

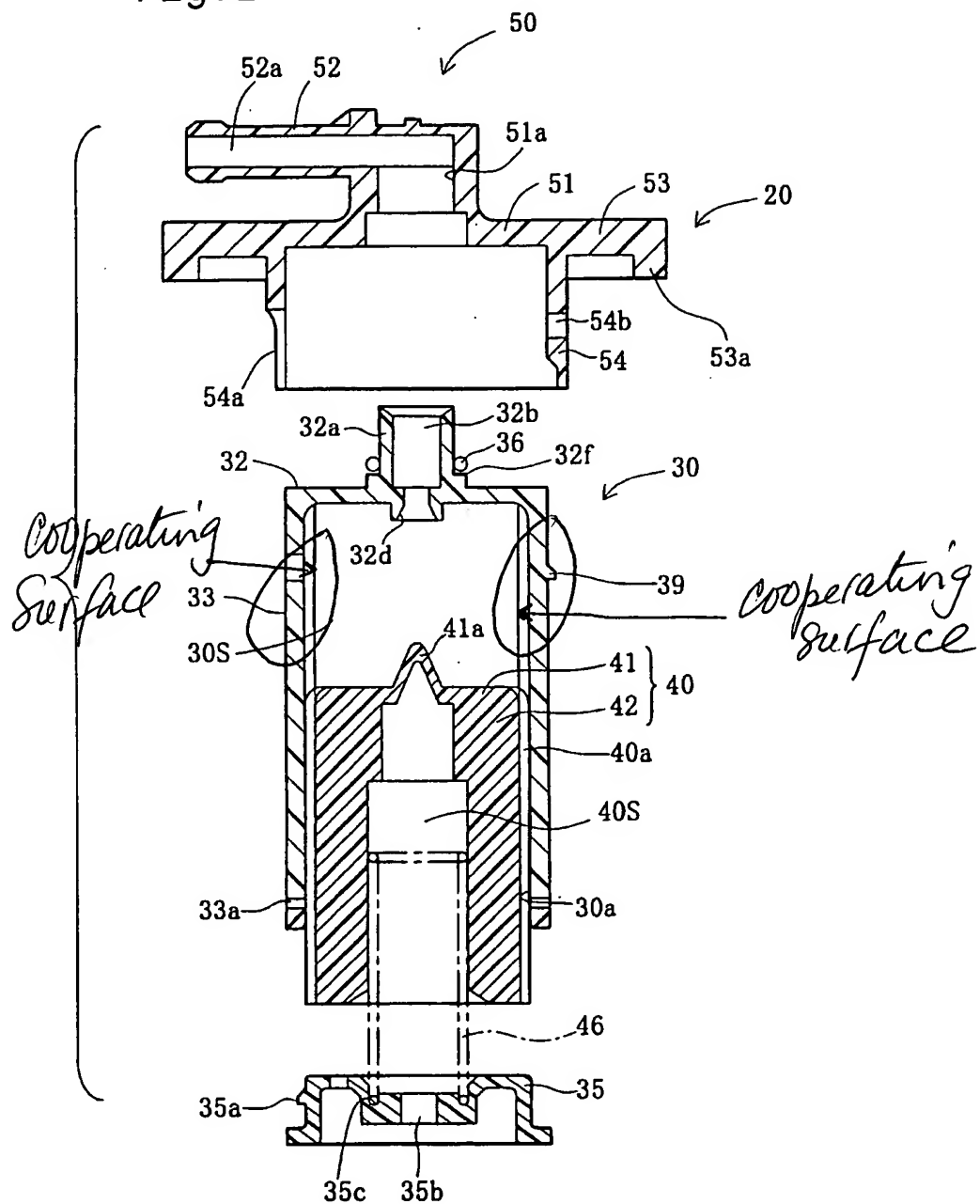
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Jun. 25, 2002

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Fig. 2



In view of the above remarks, the examiner maintains that a *prima facie* case of obviousness has been established in the instant application as outlined in the above rejections.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Nguyen can be reached on (571) 272-4491. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Essama Omgba
Primary Examiner
Art Unit 3726

eo
March 24, 2006